

SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800
 REV. 1/15/2004 This is an experimental form. Please give suggestions or comments to 607 Harrison, JEP-4B68, 272-3411.

139870

Date 11/29/04 Serial # 101634917 Priority Application Date JP 5/16/2003

Your Name M. Lewis Examiner #

AU 2572 Phone 579-1552 Room 5450

In what format would you like your results? Paper is the default.

PAPER

DISK

EMAIL

If submitting more than one search, please prioritize in order of need.

Order below

1/15

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?

Circle: USPTO DWPI EPO Abs JPO Abs IBM TDB

Other: _____

What relevant art have you found so far? Please attach pertinent citations or

Information Disclosure Statements. Related 6555851 10634917

MORIZUKA 10831130 10806397

What types of references would you like? Please checkmark:

Primary Refs _____ Nonpatent Literature _____ Other _____

Secondary Refs _____ Foreign Patents _____

Teaching Refs _____

What is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 1-25

Problem: See pages 1-3
Solution: 11 304
 - Horizontal Power Fet
 - Multiple Semiconductor Layers
 Power Semiconductor Device -- Power Control
 PGPUB 20040227211 257/578 H01L027/082
 JP 2003-139071. prai, aps 5/16/2003
 Saito + Omura + Ohashi KK Toshiba

Staff Use Only	Type of Search	Vendors
Searcher: <u>HARRISON</u>	Structure (#): _____	STN <input checked="" type="checkbox"/>
Searcher Phone: <u>22511</u>	Bibliographic <input checked="" type="checkbox"/>	Dialog <input checked="" type="checkbox"/>
Searcher Location: STIC-EIC2800, JEP-4B68	Litigation <input type="checkbox"/>	Quintel/Orbit <input checked="" type="checkbox"/>
Date Searcher Picked Up: <u>12-13-04</u>	Fulltext <input checked="" type="checkbox"/>	Lexis-Nexis <input type="checkbox"/>
Date Completed: <u>12-14-04</u>	Patent Family <input type="checkbox"/>	WWW/Internet <input type="checkbox"/>
Searcher Prep/Rev Time: <u>58</u>	Other <input type="checkbox"/>	Other <input type="checkbox"/>
Online Time: <u>46</u>		

CAS/STN FILE 'DPCI' ENTERED AT 14:47:58 ON 13 DEC 2004

L1 6061 S ZHANG/REN
 L2 7 S KARMALKAR/REN
 L3 18257 S SWITCH#####/REN
 L4 0 S L1 AND L2
 L5 369 S L1 AND L3
 L6 2 S L2 AND L3
 L7 85 S L5 AND (POWER##### OR POWER#####/REN)
 L8 221 S L5 AND (CONTROL##### OR CONTROL#####/REN)
 L9 58 S L7 AND L8
 L10 480 S (L1 OR L2 OR L3) AND (THREE OR FOUR OR FIVE OR FIFTH OR FOURTH OR THIRD)
 L11 3045 S (L1 OR L2 OR L3) AND (THREE OR FOUR OR FIVE OR FIFTH OR FOURTH OR THIRD)/REN
 L12 2 S L9 AND L10
 L13 29 S L9 AND L11
 L14 3 S L2 AND SEMICOND#####
 L15 87 S L6 OR L7 OR L12 OR L13
 L16 750 S (H01L027-082/IC OR H01L027-085/IC)
 L17 0 S L15 AND L16
 L18 87 S (L5 OR L6 OR L7 OR L8 OR L9 OR L10) AND L15
 L19 0 S (L11 OR L12 OR L13 OR L14 OR L15) AND L16
 L20 33 S L6 OR L12 OR (L13 OR L14)
 L21 89 S L15 OR L20
 L22 SEL PLU=ON L21 1- PRN : 182 TERMS

FILE 'HCAPLUS, JAPIO, WPIX' ENTERED AT 14:54:20 ON 13 DEC 2004

L23 272 S L22
 L24 3 S L23 AND (THIRD OR THREE OR TRIPLE OR TRI)(3A) SEMICONDUCT#####
 L25 1 S L23 AND (FOURTH OR FOUR)(3A) SEMICONDUCT#####
 L26 3 S (L24 OR L25)
 L27 0 S L23 AND MAIN(2W) ELECTRODE
 L28 1 S L23 AND CONTROL#####(2W) ELECTRODE
 L29 0 S L23 AND PRIMARY(2W) ELECTRODE
 L30 1 S L23 AND SEPARAT#####(3A) (ELECTRODE OR CONDUCT##### OR ANODE OR CATHODE)
 L31 252319 S POWER#####(3A) (SEMICONDUCT##### OR SWITCH##### OR CONTROL#####)
 L32 17 S L23 AND L31
 L33 1 S (L28 OR L29 OR L30) NOT L26
 L34 16 S L32 NOT ((L28 OR L29 OR L30) OR L26)
 L35 0 S L34 AND HORIZONTAL###
 L36 0 S L34 AND HEMT
 L37 0 S L34 AND HIGH ELECTRON
 L38 0 S L34 AND LAYERS
 L39 5 S L34 AND PRY=2001
 L40 0 S L34 AND PRY=2003
 L41 2 S L34 AND PRY=2002
 L42 1 S L41 NOT L39
 L43 50 S (L23 OR L24 OR L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31) AND
 OVERLAP#####(3A) (GATE OR ELECTRODE)
 L44 50 S L43 NOT (L42 OR L39)
 L45 50 S L44 NOT L33
 L46 50 S L45 NOT L26
 L47 1 S L46 AND SEMICONDUCT#####(3A) (?LAYERED OR ?LAYERS OR FILMS OR SUBLAYERS OR
 EPILAYERS)
 L48 1 S L46 AND AVALANCH#####
 L49 5 S L46 AND BREAK#####
 L50 0 S L46 AND HORIZONTAL#####
 L51 50 S L46 AND POWER#####
 L52 15 S L46 AND CONTROL#####
 L53 1 S L46 AND PASSIVAT#####
 L54 20 S (L47 OR L48 OR L49 OR L50) OR (L52 OR L53)
 L55 18 S L54 AND (ELECTRODE OR ANODE OR CATHODE)
 L56 1 S L54 AND (SBT OR HEMT OR SCHOTTKY)
 L57 7 S L55 AND ELECTRODES
 L58 7 S L57 NOT L56

Questel-Orbit 12/13/2004
File : PLUSPAT

SS Results

1 1 (1) ..FAM US20040227211/PN
2 1 /PN US20040227211
3 1 /PN US6555851
4 1821 ..INDEX /IC
H01L-027/082
H01L-027/085
H01L-027/086
5 231 4 AND POWER
6 35 5 AND CONTROL+
8 35 4 AND POWER+ AND CONTROL+
11 2146 POWER+ AND CONTROL+ AND SEMICONDUCT+ AND DEVICE+ AND (CONTROL+ 3D POWER+)
12 120 11 AND (THIRD OR THREE OR TRI OR TRIP!)
14 18 12 AND (CONTROL+ 3D (ELECTRODE+ OR CONDUCT+ OR METAL+))
15 15 12 AND (FOUR OR FOURTH)

Search statement 16

Query/Command : 14 or 15

** SS 16: Results 30

Session finished: 13 DEC 2004 Time 15:21:50